LYOPHILIZABLE AND ENHANCED COMPACTED NUCLEIC ACIDS

ABSTRACT OF THE INVENTION

Counterions of polycations used to compact nucleic acids profoundly affect shape and stability of particles formed. Shape is associated with differential serum nuclease resistance and colloidal stability. A surrogate for determining such properties that is easy to measure is the turbidity parameter. Shape also affects the suitability and efficacy of compacted nucleic acid complexes for transfecting cells by various routes into a mammalian body. Moreover, counterions such as acetate can protect compacted nucleic acid complexes from adverse effects of lyophilization